

CLAIMS

- 1 1. A radio receiver comprising:
2 a tuner that provides an audio output for a selected radio station;
3 a voice-only detection mechanism that monitors the audio output of the tuner, and
4 that provides a first output indication when the audio output of the tuner is mostly voice,
5 and that provides a second output indication when the audio output of the tuner is not
6 mostly voice; and
7 a radio processor coupled to the voice-only detection mechanism, the radio
8 processor changing an operational mode of the radio receiver according to the first and
9 second output indications of the voice-only detection mechanism.
- 1 2. The radio receiver of claim 1 further comprising an amplifier coupled to the audio
2 output of the tuner that provides an amplified audio signal to at least one speaker, wherein
3 the radio processor changes the operational mode of the radio receiver by muting the
4 amplified audio signal according to the first and second output indications of the voice-
5 only detection mechanism.
- 1 3. The radio receiver of claim 2 wherein the radio processor mutes the amplified
2 audio signal when the first output indication is received, and unmutes the amplified audio
3 signal when the second output indication is received.
- 1 4. The radio receiver of claim 2 wherein the radio processor mutes the amplified
2 audio signal when the second output indication is received, and unmutes the amplified
3 audio signal when the first output indication is received.

1 5. The radio receiver of claim 1 wherein the radio processor changes the tuner to a
2 different radio station according to the first and second output indications of the voice-
3 only detection mechanism.

1 6. The radio receiver of claim 5 further comprising:
2 a spectrum analyzer coupled to the audio output of the tuner, the spectrum
3 analyzer storing a preferred frequency spectrum signature for a radio signal;
4 a second tuner coupled to the radio processor;
5 the radio processor scanning available radio stations using the second tuner to
6 locate a program that matches the preferred frequency spectrum signature within
7 predetermined criteria, and changing to a radio station that matches the preferred
8 frequency spectrum signature when the first output indication is received.

1 7. The radio receiver of claim 1 further comprising at least one adjustment
2 mechanism that adjusts at least one threshold that determines when the voice-only
3 detection mechanism asserts the first and second output indications.

1 8. A radio receiver comprising:
2 a tuner that provides an audio output for a selected radio station;
3 an amplifier coupled to the audio output of the tuner that provides an amplified
4 audio signal to at least one speaker,
5 a voice-only detection mechanism that monitors the audio output of the tuner, and
6 that provides a first output indication when the audio output of the tuner is mostly voice,
7 and that provides a second output indication when the audio output of the tuner is not
8 mostly voice; and
9 a radio processor coupled to the voice-only detection mechanism, the radio
10 processor muting the amplified audio signal when the first output indication is received,
11 and unmuting the amplified audio signal when the second output indication is received.

1 9. A radio receiver comprising:
2 a first tuner that provides a first audio output for a selected radio station;
3 an amplifier coupled to the audio output of the first tuner that provides an
4 amplified audio signal to at least one speaker,
5 a second tuner that provides a second audio output;
6 a spectrum analyzer coupled to the first and second audio outputs, the spectrum
7 analyzer storing a preferred frequency spectrum signature for a radio signal;
8 a voice-only detection mechanism that monitors the audio output of the first tuner,
9 and that provides a first output indication when the audio output of the first tuner is
10 mostly voice, and that provides a second output indication when the audio output of the
11 first tuner is not mostly voice;
12 a radio processor coupled to the voice-only detection mechanism and coupled to
13 the second tuner, the radio processor scanning available radio stations using the second
14 tuner to locate a program that matches the preferred frequency spectrum signature within
15 predetermined criteria, and changing the first tuner to a radio station that is currently
16 broadcasting a program that matches the preferred frequency spectrum signature when the
17 first output indication is received.

1 10. A method for changing an operational mode of a radio receiver, the method
2 comprising the steps of:
3 (A) analyzing an audio output of a tuner to determine whether the audio output is
4 mostly voice; and
5 ~~(B)~~ if the audio output is mostly voice, changing the operational mode of the radio
6 receiver.

1 11. The method of claim 10 wherein step (A) comprises the steps of:
2 ~~(A1)~~ providing a first output indication when the audio output is mostly voice;
3 and
4 ~~(A2)~~ providing a second output indication when the audio output is not mostly
5 voice.

1 12. The method of claim 11 wherein step (B) mutes an amplified audio signal from
2 the tuner when the first output indication is received, and unmutes the amplified audio
3 signal from the tuner when the second output indication is received.

1 13. The method of claim 10 wherein step (B) changes the operational mode of the
2 radio receiver by muting an amplified audio signal from the tuner.

1 14. The method of claim 10 wherein step (B) changes the operational mode of the
2 radio receiver by unmuting an amplified audio signal from the tuner.

1 15. The method of claim 10 wherein step (B) changes the operation mode of the radio
2 receiver by changing the tuner to a different radio station.

1 16. The method of claim 10 further comprising the steps of:
2 storing a preferred frequency spectrum signature for a radio signal;
3 scanning available radio stations to locate a program that matches the preferred
4 frequency spectrum signature within predetermined criteria;
5 wherein step (B) changes the operational mode of the radio receiver by changing
6 the tuner to a radio station that is currently broadcasting a program that matches the
7 preferred frequency spectrum signature.

1 17. A method for changing the operational mode of a radio receiver, the method
2 comprising the steps of:
3 providing an audio output for a selected radio station;
4 amplifying the audio output;
5 supplying the amplified audio output to at least one speaker,
6 monitoring the audio output;
7 providing a first output indication when the audio output is mostly voice;
8 providing a second output indication when the audio output is not mostly voice;
9 muting the amplified audio signal when the first output indication is received, and
10 unmuting the amplified audio signal when the second output indication is received.

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1 18. A method for changing the operational mode of a radio receiver, the method
2 comprising the steps of:
3 providing a first audio output for a selected radio station;
4 storing a preferred frequency spectrum signature for a radio signal;
5 monitoring the first audio output, and providing a first output indication when the
6 first audio output is mostly voice, and providing a second output indication when the first
7 audio output is not mostly voice;
8 scanning available radio stations to locate a program that matches the preferred
9 frequency spectrum signature within predetermined criteria; and
10 changing the first audio output to a different radio station that is currently
11 broadcasting a program that matches the preferred frequency spectrum signature when
12 one of the first and second output indications is received.
